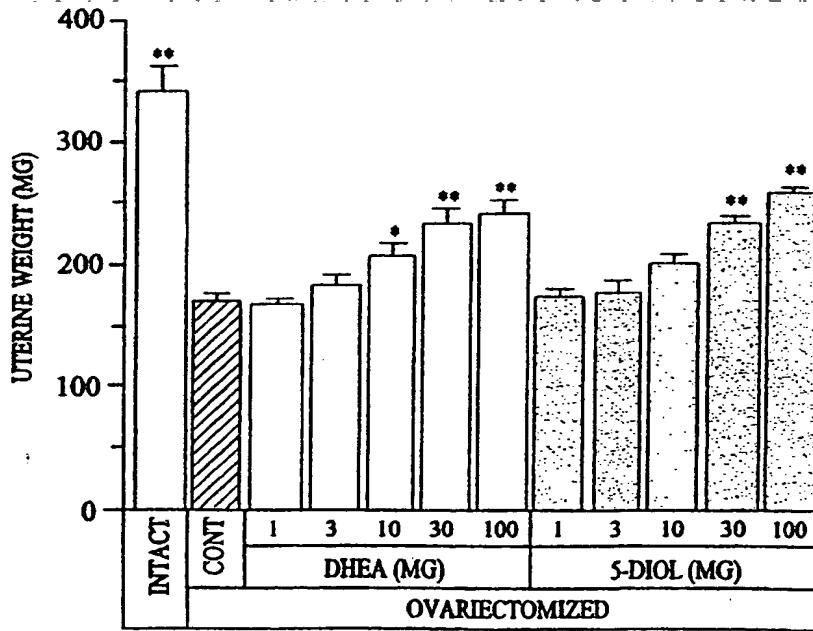




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(30) Priority Data: 09/096,286 11 June 1998 (11.06.98) US			
(71) Applicant: ENDORECHERCHE, INC. [CA/CA]; 2989 de la Promenade, Ste-Foy, Quebec G1W 2J5 (CA).			
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(74) Agent: MITCHELL, Richard, J.; Marks & Clerk, P.O. Box 957, Station B, Ottawa, Ontario K1P 5S7 (CA).		Published With international search report.	
		(88) Date of publication of the international search report: 2 November 2000 (02.11.00)	

(54) Title: PHARMACEUTICAL COMPOSITIONS AND USES FOR ANDROST-5-ENE-3 β ,17 β -DIOL

(57) Abstract

Androst-5-ene-3 β ,17 β diol is used to treat or reduce the likelihood of acquiring osteoporosis or menopausal symptoms, or other diseases affected by estrogen receptor activity, like vaginal atrophy, hypogonadism, diminished libido, skin atrophy, urinary incontinence, ovarian cancer, uterine cancer, endometriosis, obesity, cardiovascular disease, loss of muscle mass, loss of energy or fatigue, Alzheimer's disease and loss of memory and for conditions which respond well to DHEA treatment, but where a higher ratio of estrogenic to androgenic effects is desired. Combination therapies are included, as are kits and pharmaceutical compositions for providing the active ingredients of claimed methods and combinations.

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INTERNATIONAL SEARCH REPORT

Int'l. Appl. No.

PCT/CA 99/00537

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61K31/565

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, MEDLINE, WPI Data, CHEM ABS Data, BIOSIS, EMBASE

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P, X	WO 98 56386 A (CAMPONOVO TIZIANO ;SUNNIMEX LTD (GB)) 17 December 1998 (1998-12-17)	1-4, 6-8, 10, 13-15, 25-27
X	abstract page 3, line 3 -page 12, line 4; claims 1-13	1-8, 26, 27
X	US 5 387 583 A (LORIA ROGER M) 7 February 1995 (1995-02-07) abstract; claims 1-7	1-8, 26, 27
		-/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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Date of the actual completion of the international search

Date of mailing of the international search report

7 August 2000

16.08.00

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INTERNATIONAL SEARCH REPORT

International Application No
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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA 99/00537

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 8-27 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-23,25-27

Pharmaceutical compositions and their use (i) in the treatment of symptoms of menopause, vaginal atrophy, hypogonadism, osteoporosis, diminished libido, skin atrophy, urinary incontinence, ovarian cancer, uterine cancer, skin dryness, endometriosis, obesity, cardiovascular disease, atherosclerosis, insulin resistance, loss of muscle mass, loss of energy or fatigue, Alzheimer disease, (ii) in a method of contraception.

2. Claim : 24

Use of dehydroepiandrosterone in association with other compounds as defined in claim 24 in the treatment of breast cancer, uterine cancer, ovarian cancer or endometriosis.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claim 24 relates to a product/compound/method defined by reference to a desirable characteristic or property, namely antiestrogen, androgenic inhibitor of aromatase, inhibitor of 17beta hydroxysteroid dehydrogenase, LHRH agonist or antagonist.

The claims cover all products/compounds/methods having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such products/compounds/methods. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the product/compound/method by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the products/compounds/methods as disclosed on page 22, paragraph 2 of the description.

The term "pro-drug" is not clear in the present context since it is not clear which compounds are metabolised by or in the human body into the mentioned compound.

The term "treating or reducing the likelihood of acquiring reduced or imbalanced concentrations of sex steroids" is not clear in relation to a therapeutic use because it is not exhaustively known which diseases are associated with reduced or imbalanced concentrations of sex steroids.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inte ional Application No

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